Title (en)

A FUEL CELL SYSTEM FOR A VEHICLE

Title (de)

BRENNSTOFFZELLENSYSTEM FÜR EIN FAHRZEUG

Title (fr)

SYSTÈME DE PILE À COMBUSTIBLE POUR UN VÉHICULE

Publication

EP 4203115 A1 20230628 (EN)

Application

EP 21217825 A 20211227

Priority

EP 21217825 A 20211227

Abstract (en)

The disclosure relates to a fuel cell system (3) for a vehicle, said fuel cell system comprising at least one fuel cell stack (4) having one or more proton exchange membrane, PEM, fuel cells (4a) and at least one DC-DC power converter (11) arranged in electrical connection with said at least one fuel cell stack, said at least one DC-DC power converter having an inductor (12), wherein said inductor is configured and arranged to induce and direct magnetic flux towards said one or more PEM fuel cells.

IPC 8 full level

H01M 8/02 (2016.01); **H01M 8/04223** (2016.01)

CPC (source: EP)

H01M 8/02 (2013.01); **H01M 8/04223** (2013.01); Y02E 60/50 (2013.01)

Citation (applicant)

AHMED A. ABDEL-REHIM: "Energy Conversion and Management", vol. 198, 2019, ELSEVIER, article "The influence of electromagnetic field on the performance and operation of a PEMfuel cell stack subjected to a relatively low electromagnetic field intensity", pages: 111906

Citation (search report)

- [XY] US 2004018400 A1 20040129 - HERMAN GREGORY [US]
- [X] US 3493436 A 19700203 - JOHNSEN CARSTEN INGEMAN
- [XY] ABDEL-REHIM AHMED A ED - KRAJACIC GORAN ET AL: "The influence of electromagnetic field on the performance and operation of a PEM fuel cell stack subjected to a relatively low electromagnetic field intensity", ENERGY CONVERSION AND MANAGEMENT, ELSEVIER SCIENCE PUBLISHERS, OXFORD, GB, vol. 198, 9 August 2019 (2019-08-09), XP085848040, ISSN: 0196-8904, [retrieved on 20190809], DOI: 10.1016/J.ENCONMAN.2019.111906

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

Designated validation state (EPC)

KH MA MD TN

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